Current Listing of Claims

This listing of claims will replace all previous versions and listings of claims in the applications.

1. (Previously presented) A system for communications, comprising:

a housing having air flow perforations over more than half of at least one surface;

a printed circuit board including at least one component on a first side of the printed circuit board and at least one optical component on a second side of the printed circuit board;

a heat sink in thermal contact with the optical component and the housing, the heat sink conducting heat from the optical component to the housing; and

a thermal plate coupled between the at least one surface of the housing and the printed circuit board, the thermal plate being in thermally conductive contact with the at least one component and the housing.

2. (Original) The system according to claim 1, further comprising:

at least one thermally conductive and compliant pad coupled between the thermal plate and the at least one component.

3. (Original) The system according to claim 2, wherein the thermal plate includes at least one raised portion, each raised portion being raised to facilitate thermal contact between each of the at least one raised portion and a corresponding one of the at least one component.

4. (Original) The system according to claim 3, wherein the thermal plate is aluminum and is manufactured by at least one of stamping and die casting.

5. (Original) The system according to claim 1,

wherein the housing comprises mating halves, each mating half including a dimpled mating surface and a rigid mating surface, each dimpled mating surface engaging the opposing rigid mating surface,

wherein the dimpled mating surface comprises at least one chamfer and at least one dimpled member for engaging the rigid surface.

6. (Canceled)

7. (Original) The system according to claim 6, wherein the optical component includes a metal ferrule, further comprising:

an optical transceiver having a grounded metal ferrule electrically coupled to the optical component; and

a metal shroud coupled to the housing for surrounding the optical connector.

8. (Original) The system according to claim 7, wherein the metal shroud comprises dimples for electrically coupling the connector to the housing.

9. (Previously presented) A method of manufacturing a communications system comprising:

providing a printed circuit board having high power components on one side of ~~a~~ the printed circuit board;

providing a thermal plate to allow thermal conductive contact between the high power components and the thermal plate and the thermal plate and a housing;

providing a temperature sensitive component on the opposite side of the printed circuit board from the thermal plate;

thermally coupling the temperature sensitive component to the housing;

providing a heat sink thermally coupled to the housing and the component to cause conductive heart transfer between the temperature sensitive component and the housing; and

providing the housing with perforations covering a substantial portion of its surfaces to permit exchange of heat through the perforations to the surrounding environment; wherein the thermal plate is positioned between the housing and the printed circuit board.

10. (Canceled)

11. (Original) The method according to claim 9 ~~10~~, wherein the temperature sensitive component is an optical component.

12. (Original) The method according to claim 11, wherein the optical component is coupled

to an optical transceiver on the printed circuit board and wherein the optical transceiver is grounded.

13. (Original) The method according to claim 12, wherein the thermal plate is thermally coupled to each high power component through a thermally conductive and compliant pad.

14. (Original) The method according to claim 13,

wherein the housing includes mating halves, each mating half including a dimpled mating surface and a rigid mating surface, each dimpled mating surface engaging the opposing rigid mating surface,

wherein the dimpled mating surface comprises at least one chamfer and at least one dimple member for engaging the rigid surface.

15. (Canceled)

16. (Previously presented) The method according to claim 11, further comprising

positioning a thermally conductive and compliant pad between the heat sink and the temperature sensitive component.